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APPLICATION NO. - 연화/4중한, 공동	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.	
<del>- 777 480,</del> 38	9 01/11/00	BOMAN		В	CATX-N	
– 024988 LEONA L L	Almen	HM12/0717	コ	EXAMINER		
369 PINE	STREET			HOLLERAN, A		
SUITE 610				ART UNIT	PAPER NUMBER	
SHN FRANC	ISCO CA 9410	4-3313		1642	12	
				DATE MAILED:	07/17/01	

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 

Application No. 09/480,389

Applicant(s)

Bowman, B.

Examiner

Office Action Summary

Anne Holleran

Art Unit 1642



	The MAILING DATE of this communication appears	on the cover sheet v	with the corres						
A SHOTHE No. 2 Extended to 1 If the best of 1 If the co. 2 Failure Any results of 1 If No. 2	ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION. Is sions of time may be available under the provisions of 37 Ceter SIX (6) MONTHS from the mailing date of this communic period for reply specified above is less than thirty (30) days considered timely. Period for reply is specified above, the maximum statutory mmunication.  The to reply within the set or extended period for reply will, by the eply received by the Office later than three months after the reply patent term adjustment. See 37 CFR 1.704(b).	CFR 1.136 (a). In no excation. s, a reply within the state of the period will apply and was the apyly statute, cause the apyly statute, cause the apyly and was the apyly statute, cause the apyly and was the apyly statute, cause the apyly and was the apyly statute, cause the apyly statute.	vent, however, natutory minimum vill expire SIX (6	nay a reply be timely filed  of thirty (30) days will  ) MONTHS from the mailing date of this  ome ABANDONED (35 U.S.C. § 133).					
Status									
1) 💢	Responsive to communication(s) filed on Apr 26, 2	-		•					
2a) ☐	This action is <b>FINAL</b> . 2b)  This ac	tion is non-final.							
3) 🗆	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.								
Disposi	tion of Claims			•					
4) 💢	Claim(s) 1-6, 9-28, and 31-54		is/are	pending in the application.					
4	a) Of the above, claim(s)		is/are	withdrawn from consideration.					
5) 🗆	Claim(s)		i	s/are allowed.					
6) 🗆	Claim(s)			is/are rejected.					
7) 🗆	Claim(s)			s/are objected to.					
8) 💢	Claims 1-6, 9-28, and 31-54	are sub	ject to restric	tion and/or election requirement.					
Applica	tion Papers								
9) 🗆	The specification is objected to by the Examiner.								
10)	The drawing(s) filed on is/are	e objected to by the	Examiner.						
11)	The proposed drawing correction filed on	is: a)[	approved	b) $\square$ disapproved.					
12)	The oath or declaration is objected to by the Exam	iner.	•						
13) ☐ a) ☐	under 35 U.S.C. § 119  Acknowledgement is made of a claim for foreign p  All b) Some* c) None of:  Certified copies of the priority documents have  Certified copies of the priority documents have  Copies of the certified copies of the priority described application from the International Bures of the attached detailed Office action for a list of the	ve been received. ve been received in documents have bee eau (PCT Rule 17.2(	Application N en received in a)).	o					
14)□	Acknowledgement is made of a claim for domestic			e).					
Attachm	ent(s)	·		•					
15) 🔲 No	otice of References Cited (PTO-892)	18) Interview Summar	γ (PTO-413) Paper I	No(s)					
_	otice of Draftsperson's Patent Drawing Review (PTO-948)	19) Notice of Informal	Patent Application (	PTO-152)					
17) 🔲 Inf	formation Disclosure Statement(s) (PTO-1449) Paper No(s).	20) Other:							

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## **DETAILED ACTION**

## Election/Restriction

1. The amendment filed April 26, 2001 (Paper No. 11) is acknowledged. Claims 7, 8, 29 and 30 were canceled. Claims 49-54 were added.

Claims 1-6, 9-28 and 31-54 are pending.

- 2. Applicant's election with traverse of Group II in Paper No. 11, filed April 26, 2001, is acknowledged. Upon reconsideration, the restriction requirement between Groups I (claims 1-6, 9-28 and 31-54) and II (claims 1-6, 9-28 and 31-54) is removed. Upon reconsideration, the species election requirement from the species of biological samples recited in claim 9 and from the species of detection methods recited in claim 22 is removed. The species election requirement between methods of detection of germline and detection of somatic mutations is removed in light of the amendment to the claims limiting the methods to diseases or disease susceptibility associated with germline mutation.
- 3 Upon further consideration, claims 1-6, 9-28 and 31-54 are subject to a second restriction requirement:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

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I. Claims 1-6, 9-23, and 45-53, drawn to methods for detecting a disease or a disease susceptibility trait associated with a germline mutation in one subject gene, classified in class 435, subclass 7.1.

- II. Claims 24-28, 31-44 and 54, drawn to methods for detecting a disease or a disease susceptibility trait associated with a germline mutation in one of two or more subject genes, classified in class 435, subclass 7.1.
- 4. The inventions are distinct, each from the other, for the following reasons:

Inventions I and II are drawn to distinct methods because the methods of group I require different steps than the methods of group II. The methods of group I require the identification of one subject gene, whereas the methods of group II require the identification of at least two subject genes. Furthermore, the calculation of the ratio of amount of wild-type protein in group I is with reference to standard housekeeping proteins, whereas the calculation of the ratio of amount of wild-type protein in group II is between one of the subject genes and any number of other subject genes. Thus, the calculation of the ratios yield different information in the methods of group I than does the calculation of the ratio in the methods of group II.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

## Election of species:

In group I, Claims 1-6 and 9-15, 17, 22 and 23 are generic to a plurality of disclosed patentably distinct species of subject genes, comprising ATM, APC, BRCA1, BRCA2, CFTR, cmyb, dystrophin, E-cadherin, EMD, FAA, IDS, MLH1, MSH2, MSH6, NF1, NF2, p16, PKD1, PKD2, PMS1, PMS2, PTCH, TGFBR2, and VHL. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

In group II, Claims 24-28, 31-37, 39, 43, 44 and 52 are generic to a plurality of disclosed patentably distinct species of subject genes, comprising ATM, APC, BRCA1, BRCA2, CFTR, c-myb, dystrophin, E-cadherin, EMD, FAA, IDS, MLH1, MSH2, MSH6, NF1, NF2, p16, PKD1, PKD2, PMS1, PMS2, PTCH, TGFBR2, and VHL. Applicant is required under 35 U.S.C. 121 to elect two disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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Any inquiry concerning this communication or earlier communications from the Office should be directed to Anne Holleran, Ph.D. whose telephone number is (703) 308-8892. Examiner Holleran can normally be reached Monday through Friday, 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa, Ph.D. can be reached at (703) 308-3995.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist at telephone number (703) 308-0196.

AZH

Anne L. Holleran Patent Examiner July 15, 2001

ON

ANTHONY C. CAPUTA SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1660